DETAILED ACTION

Allowable Subject Matter

1. Claims 6-13, 30-44 and 48-68 are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dave Nelson on 10/18/2011.

The following amendments were discussed in the telephone interview:

Cancel claims 1-4, 14, 16-29 and 45-47.

Amend claims 6-7 and 35.

Add new claims 48-68.

Pending claims: 6-13, 30-44 and 48-68.

The application has been amended as follows:

Claims 1-5. (Canceled)

Claim 6. (Currently Amended) A method of providing documents comprising:

collecting, by one or more processors, location information associated with first users that access a resource;

performing, by one or more processors, an analysis on the collected location information to determine a geographic relevance of the resource;

determining, by one or more processors, second location information associated with a second user; and

providing, by one or more processors, a document associated with the resource to the second user based, at least in part, on a matching of the geographic relevance of the resource to the second location information.

Claim 7. (Currently Amended) The method of claim 6, wherein [[the]] collecting the location information further comprises collecting the location information from multiple first users, and

wherein performing [[an]] the analysis further comprises performing a cluster analysis.

Claims 14-29. (Canceled)

Claim 35. (Currently Amended) A method for determining a probability that a geographic location of a user submitting a search query is geographically relevant to a network resource, the method comprising:

determining, by one or more processors, a geographic location associated with the user;

acquiring, by one or more processors, geographic relevance information for the network resource, the geographic relevance information including information that defines at least one cluster associated with the network resource, the information defining the at least one cluster including at least a center point of the cluster and a measure of dispersion of the cluster;

determining, by one or more processors, the probability that the geographic location of the user is geographically relevant to the network resource based on a statistical model applied to the at least one cluster; and

returning, by one or more processors, search results to the user based on the determined probability.

Claims 45-47. (Canceled)

48. (New) A device comprising:

a memory to store instructions; and

a processor to implement the instruction to:

collect location information associated with first users that access a resource,

perform an analysis on the collected location information to determine a geographic relevance of the resource,

determine second location information associated with a second user, and

provide a document associated with the resource to the second user based, at least in part, on a matching of the geographic relevance of the resource to the second location information.

49. (New) The device of claim 48, wherein the processor, when implementing the instruction to collect the location information, is further to:

collect the location information from multiple first users, and

wherein the processor, when implementing the instruction to perform the analysis, is further to:

perform a cluster analysis.

50. (New) The device of claim 48, wherein the resource is a web document.

51. (New) The device of claim 50, wherein the document associated with the resource is an advertisement.

52. (New) The device of claim 48, wherein the document associated with the resource includes the resource.

53. (New) The device of claim 48, wherein the location information includes network addresses of the first users.

54. (New) The device of claim 53, wherein the processor, when implementing the instructions, is further to:

map the network addresses to two-dimensional coordinate information.

55. (New) The device of claim 48, wherein the processor, when implementing the instructions to collect the location information associated with the first users, is further to collect at least one of

location information stored in cookies,

location information derived from search terms entered by the user, or

location information derived from browsing patterns.

56. (New) A method comprising:

locating, by one or more processors, a set of documents relevant to a search query, where the set documents are relevant to the search query based at least in part on geographic relevance information associated with documents in the set of documents;

generating, by one or more processors, the geographic relevance information associated with the documents in the set of documents, including:

gathering a plurality of network addresses of users that access the documents in the set of documents,

mapping the plurality of network addresses to location data points, and

performing a cluster analysis on the location data points to locate clusters of the located data points, the located clusters indicating areas of geographic relevance; and

returning, by one or more processors, search results to a user based on the set of documents.

57. (New) The method of claim 56, wherein performing the cluster analysis on the location data points is based on a determination of whether the location data points form one or more clusters.

58. (New) The method of claim 57, further comprising:

determining a probability that a location associated with a user that submitted the search query is geographically relevant to the documents in the set of documents based on a statistical model applied to the one or more clusters.

59. (New) The method of claim 56, wherein performing the cluster analysis on the location data points includes:

normalizing the location data points.

60. (New) The method of claim 59, wherein normalizing the location data points is based, at least in part, on at least one population associated with the location data points.

61. (New) A device to determine a probability that a geographic location of a user submitting a search query is geographically relevant to a network resource, the device comprising:

a memory to store instructions; and

a processor to implement the instruction to:

determine a geographic location associated with the user,

acquire geographic relevance information for the network resource, the geographic relevance information including information that defines at least one cluster associated with the network resource, the information defining the at least one cluster including at least a center point of the cluster and a measure of dispersion of the cluster,

determine the probability that the geographic location of the user is geographically relevant to the network resource based on a statistical model applied to the at least one cluster, and

return search results to the user based on the determined probability.

62. (New) The device of claim 61, wherein the processor implements the instructions to determine the geographic location associated with the user based on terms in the search query.

63. (New) The device of claim 61, wherein the statistical model is based on a Gaussian model.

64. (New) The device of claim 61, wherein the processor implements the instructions to determine the geographic location associated with the user based on web access patterns of the user.

65. (New) The device of claim 61, wherein the processor, when implementing the instructions to acquire the geographic relevance information for the network resource, is further to:

gather a plurality of network addresses of users that access the network resource;

map the plurality of network addresses to location data points; and

perform a cluster analysis on the location data points to generate the geographic relevance information.

66. (New) The device of claim 65, wherein the processor, when implementing the instructions to map the plurality of network addresses to the location data points, is further to:

associate the gathered network addresses with two-dimensional points defined by latitude and longitude values estimated from the network address.

67. (New) The device of claim 65, wherein the processor, when implementing the instructions to map the plurality of network addresses to the location data points, is further to:

map the network addresses to cities that are estimated to be within a particular distance to physical locations associated with the network addresses; and

map the cities to two-dimensional points defined by latitude and longitude values.

68. (New) The device of claim 65, wherein the processor, when implementing the instructions to perform the cluster analysis, is further to:

determine whether the location data points tend to form one or more clusters, and

associate geographic location information with the network resource based on the one or more clusters.

Conclusion

Examiner's Note: Examiner has cited particular paragraphs / columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner.

Should applicant amend the claims of the claimed invention, it is respectfully requested that applicant clearly indicate the portion(s) of applicant's specification that support the amended claim language for ascertaining the metes and bounds of applicant's claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

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/WJG/

/VIVEK SRIVASTAVA/

Supervisory Patent Examiner, Art Unit 2433